

## Special Issue

# Space Division Multiplexing Techniques

### Message from the Guest Editors

Optical fiber communication is the backbone of the telecommunications infrastructure that supports the internet. As internet demand keeps on increasing, the need for a single fiber to carry more information is crucial. It is very important to find smart solutions to increase the capacity  $x$  times in a single fiber by increasing the cost much less than  $x$  times. Space division multiplexing (SDM) is viewed to be the most promising solution to meet this criterion. SDM techniques can be categorized as multi-mode fiber (MMF)/few-mode fiber (FMF) transmission, uncoupled-core multi-core fiber (MCF) transmission and coupled-core MCF transmission. We encourage researchers to explore issues including, but not limited to:

- SDM transmission system, including MMF/FMF, uncoupled-core MCF, coupled-core MCF transmission;
- High-performance SDM devices;
- SDM transmitter and receiver system design;
- SDM transmission signal processing algorithm and complexity;
- SDM technique applications in fiber sensing and other fields.

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### Guest Editors

Dr. Bin Huang  
Dr. Jing Zhang  
Dr. Ning Wang

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### Deadline for manuscript submissions

closed (15 July 2024)



## Photonics

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